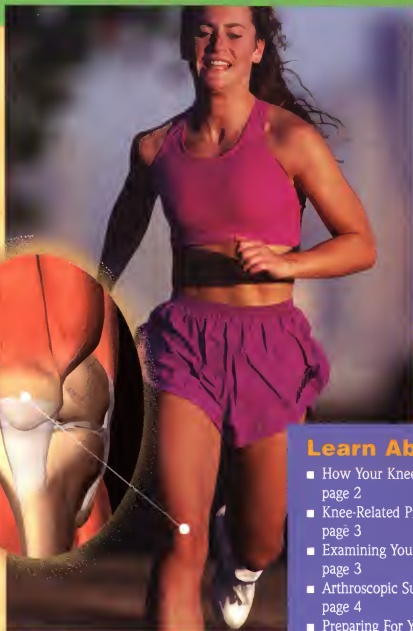


# Arthroscopy

## Of Your Knee

Diagnosing and Treating Your Injury



### Learn About:

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- Examining Your Knee, page 3
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## How Your Knee Works

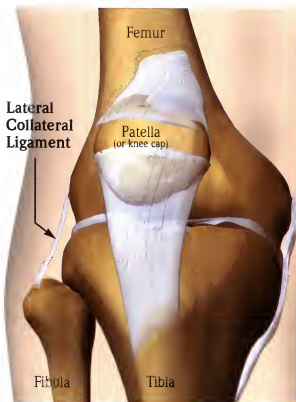
The knee joint is one of your body's most complex joints...and the most likely joint to be injured. Considering how often the knee is called upon to perform, however, it is really quite durable.

### The Bones

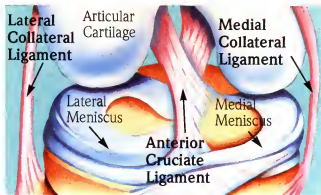
In essence, the knee is made up of four bones. The **femur**, which is the large bone in your thigh, attaches by ligaments and the knee capsule to your **tibia**, otherwise known as the shinbone. The **fibula** runs parallel to the **tibia**, between the knee and the ankle. The **patella**, or knee cap, rides on the knee joint and offers protection as the knee bends, straightens and rotates.

### Supporting Tissue

While the bones around the knee support it and provide the rigid structure of the joint, muscles such as the **quadriceps** at the front of the knee and the **hamstring** at the back of the knee help to move the joint. **Ligaments** are equally vital because they stabilize the joint. The knee joint also includes **meniscal cartilage**, a C-shaped piece of tissue that aids in cushioning the joint and allowing the bones to slide freely on each other. A small fluid sac, known as the **bursa**, helps to lubricate the sliding movement.

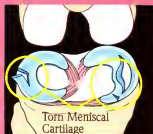


*Front View of Knee*



*Interior View of Knee*

## Knee Related Problems



### Meniscal Cartilage Tear -

Often caused by sudden twisting or continued squatting, a tear of this nature can produce swelling or pain.



### Articular Cartilage Wear -

The result of aging or injury, this condition is characterized by pain, stiffness in the joint or grinding.



### Ligament Tear -

Usually brought on by falling, twisting or banging the knee against another object, this injury can cause pain, swelling and total knee instability.



### Worn or Off-Center Patella -

The rigors of age, overuse or a direct blow can create this problem, with symptoms that include pain and restricted joint movement.



## Examining Your Knee

A sore knee can be a relatively minor, temporary problem or it can indicate a more serious injury. If the pain is acute or continuous, a physician should be consulted.

The physician will normally ask for a complete history of the affected area. This is followed by a physical examination to determine the location of the pain, the degree of swelling and any functional limitations. In many instances, **x-rays** are recommended to learn more about the condition of the bones and joints.

Occasionally, additional diagnostic tests may be ordered. If soft tissue damage is suspected, tests may include a **magnetic resonance imaging (MRI)** exam that provides computerized images of the tissue, which traditional x-rays cannot record. Blood or urine studies also may be requested by your physician.



MRI image.

# Arthroscopic Surgery

## Meniscus surgery



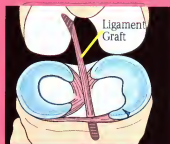
involves either removing the damaged tissue or repairing it by trimming and suturing, depending upon where the damage is located.

## Articular cartilage



is often repaired by shaving or removing loose debris. If worn cartilage has exposed the bone beneath, drilling or burring the bone can stimulate cartilage growth.

## The Anterior Cruciate Ligament (ACL),



the major stabilizing ligament of the knee, is commonly repaired through arthroscopy. In the case of a torn ACL or other knee liga-

ment, this procedure usually involves harvesting a portion of the patellar tendon to replace the damaged tissue.

## Patella treatment



will depend upon whether it has been damaged by general wear or by a structural problem. Arthroscopic procedures include shaving

the rough cartilage surface underneath the kneecap or clipping bands of tissue for realignment purposes.

## Understanding the Procedure

Many knee problems can be resolved through

**Arthroscopy.** In this surgical technique, the physician inserts a needle-shaped fiber optic telescope, or arthroscope, into the joint through an incision approximately 1/4-inch in length. Fluid is dispersed into the joint to stretch it and to enable viewing of the joint structures through the arthroscope's magnifying lenses. Then, utilizing instruments as small as 1/10-inch, corrective surgery is performed.

Usually offered as an outpatient procedure, arthroscopy

causes less trauma than traditional, more invasive surgeries to the knee muscles, ligaments and tissues.

## Preparing for the Procedure

If surgery is required, you will be instructed not to eat or drink anything the night before your surgery. No other special preparations are necessary for knee arthroscopy, other than you should be in good overall health. Before surgery begins, you will receive either a general anesthetic that will put you to sleep or a local anesthetic that will numb your knee. This will make the procedure as easy as possible for you.



# After Your Surgery

## Beginning Your Recovery

Since arthroscopy utilizes very small incisions, there is little scarring and minimal pain. You can look forward to a relatively quick recovery. But it's important to know what this entails.

### Hospital Post-Op

Following your arthroscopic procedure, your knee will be bandaged, elevated and most likely iced down to minimize swelling. You may be given pain medication at the hospital, as well as a prescription to help alleviate any later discomfort.

The nurse who has been monitoring your blood pressure and pulse will then arrange for your release once you are clear-headed and alert. Before surgery, arrange to have a friend or member of your family drive you home after you leave the hospital. Comfortable, loose-fitting clothes are recommended during the early days of recovery.

### Home Care

You may find it advantageous to use crutches for several days after surgery. This will keep weight off your knee. When resting in a chair or bed, move your repaired leg often and keep it elevated to decrease the likelihood of swelling. During the first two days after arthroscopy, ice your knee several times per day, for 15 to 20 minutes at a time.

Once you are able to stand comfortably for 10 minutes or more, you may shower as long as you keep your bandage dry. This can be done by covering your leg with plastic and sealing the plastic with a soft rubber band.

### Exercise and Therapy

To help your recovery, try to resume work and daily activities as soon as your doctor says you're ready. Starting back to work will depend in part upon the kind of work you do. Though you will want to avoid vigorous exercise for up to 6 weeks after surgery, it's important for you to follow a regular therapy routine. Your physician will prescribe such things as limited **walking** and various **slow, steady leg movements**. You may be referred to a physical therapist who can customize a recovery program especially for you. A low-impact exercise such as **swimming** can be particularly helpful in strengthening your muscles, increasing circulation and improving flexibility.



Low-impact exercise such as swimming can strengthen your muscles.



## A Reminder of the Risks

Some risks and complications from the arthroscopy are possible. These include:

- Bleeding into the joint
- Surgical wound infection
- Joint stiffness
- Slow healing and/or recurring knee problems

## Frequently Asked Questions

### What tests will be required to check my knee?

Often, your physician will want to take traditional x-rays or do a magnetic resonance imaging exam (MRI). Blood and urine analysis might also be run.

### What are the risks with arthroscopic surgery?

Though there are fewer risks in arthroscopy than with other types of surgeries, some possibilities include bleeding into the joint, infection, joint stiffness and recurring knee problems.

### How long will I be in the hospital?

Most arthroscopic procedures are performed on an outpatient basis, meaning that you will return home several hours after surgery.

### When can I go back to work?

Unless you work at a physical, labor-intensive job, you can usually return to work within a few days after your surgery. You should consult your physician for an exact timetable.

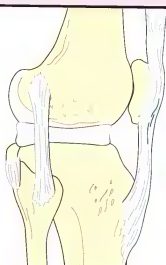
### When can I begin my normal sports activities?

Usually, you can begin your rehab program within two or three days of your arthroscopic procedure. Returning to your normal sports routine will depend upon the type of sports you enjoy and the progress of your exercises.

By most estimates, it will be six weeks before you can resume playing sports.



Anterior View



Lateral View



Interior View of Knee

## Making the Right Choices

If you properly follow your rehabilitation program, it's possible to speed up your recovery. When recuperating from knee surgery, you should remember these simple pointers.

### DO

- ☐ Elevate your knee above heart level while resting
- ☐ Ice your knee periodically for several days after surgery
- ☐ Use crutches, if necessary, to relieve pressure
- ☐ Follow a good, consistent therapy program
- ☐ Resume normal daily activities as soon as prudently possible

### DON'T

- ☐ Dangle your leg when reclining
- ☐ Get your bandage wet
- ☐ Stand for prolonged periods of time
- ☐ Attempt vigorous exercises not included in your recovery program
- ☐ Resume driving until cleared by your physician

### Special Physician Instructions

Use area below and to the left to provide patient with specific detailed information and instructions.

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## Taking the Next Step

By following your surgeon's instructions and using good common sense, your recovery from arthroscopic knee surgery is just around the bend. Fiber optic breakthroughs and the versatile arthroscope have made this a common procedure...with excellent results. After arthroscopic knee surgery, you can look forward to renewing the activities that you enjoy so much.



### Patient Questions

Write your questions below.

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### A Matter of Fact

Did you know that Anterior Cruciate Ligament injuries occur on the average of 37 times per year in the National Basketball

Association? NBA stars that have suffered these debilitating setbacks include Danny Manning, Kareem Abdul-

Jabbar, Shaquille O'Neil and Dennis Rodman. All of these players, however, resumed productive basketball careers.

